

CLAIMS

1. Modified red phosphorus comprising red phosphorus-containing particles (A) whose surfaces are coated with a modified resin film (F) containing white particles (B) having a whiteness of 70 or more, color particles (C) having a hue H of 30 to 80 in the Munsell color-system hue circle, and a binder resin (D).

2. Modified red phosphorus according to claim 1, wherein the red phosphorus-containing particles (A) are at least one type selected from the group consisting of red phosphorus particles (A1), stabilized red phosphorus (A2) comprising the red phosphorus particles (A1) whose surfaces are coated with an inorganic material, stabilized red phosphorus (A3) comprising the red phosphorus particles (A1) whose surfaces are coated with a thermosetting resin, and double-coated stabilized red phosphorus (A4) comprising the red phosphorus particles (A1) whose surfaces are coated with the inorganic material and further coated with the thermosetting resin.

3. Modified red phosphorus according to claim 1 or 2, wherein the content of the white particles (B) is 10 to 50% by weight, and the content of the color particles (C) is 0.1

to 5.0% by weight.

4. Modified red phosphorus according to any one of Claims 1 to 3, wherein the average particle diameter is 1 to 100 μm .

5. Modified red phosphorus according to any one of Claims 1 to 4, wherein the red phosphorus content is 50 to 90% by weight.

6. Modified red phosphorus according to any one of Claims 1 to 5, wherein the white particles (B) are composed of titanium dioxide.

7. Modified red phosphorus according to any one of Claims 1 to 6, wherein the color particles (C) are green particles or blue particles.

8. Modified red phosphorus according to any one of Claims 1 to 6, wherein the color particles (C) are particles of at least one pigment selected from the group consisting of phthalocyanine green, phthalocyanine blue, dichromium trioxide, ultramarine blue, and iron blue.

9. A method of producing modified red phosphorus

comprising performing a curing reaction of a binder resin (D) in an aqueous slurry containing red phosphorus-containing particles (A), white particles (B) having a whiteness of 70 or more, and color particles (C) having a hue H of 30 to 80 in the Munsell color-system hue circle.

10. A method of producing modified red phosphorus according to claim 9, wherein the curing reaction of the binder resin (D) is a polymerization reaction of a synthetic raw material or initial condensation product of a thermosetting resin.

11. A method of producing modified red phosphorus according to claim 9, wherein the curing reaction of the binder resin (D) is a radical polymerization reaction of a monomer having an unsaturated double bond.

12. A method of producing modified red phosphorus according to claim 9, wherein the curing reaction of the binder resin (D) is a polymerization reaction of a cationic water-soluble resin in the presence of a nonionic surfactant or anionic surfactant.

13. A method of producing modified red phosphorus according to claim 10, wherein the thermosetting resin is a

phenolic resin.

14. A method of producing modified red phosphorus according to claim 12, wherein the cationic water-soluble resin is a polyamide-epoxy resin.

15. A decolorized red phosphorus composition comprising a mixed powder containing modified red phosphorus according to any one of claims 1 to 8 and white particles (B) having a whiteness of 70 or more.

16. A decolorized red phosphorus composition according to claim 15, wherein the mixed powder further contains color particles (C) having a hue H of 30 to 80 in the Munsell color-system hue circle.

17. A decolorized red phosphorus composition according to claim 15 or 16, wherein the whiteness is 65 or more.

18. A decolorized red phosphorus composition according to any one of claims 15 to 17, wherein the hue H in the Munsell color-system hue circle is 20 to 80.

19. A decolorized red phosphorus composition according to any one of claims 15 to 18, wherein the red phosphorus

content is 20% by weight or more.

20. A decolorized red phosphorus composition according to any one of claims 15 to 19, wherein the white particles
(B) are composed of titanium dioxide.

21. A decolorized red phosphorus composition according to any one of claims 15 to 20, wherein the color particles
(C) are green particles or blue particles.

22. A flame-retardant polymer composition comprising a decolorized red phosphorus composition according to any one of claims 15 to 21 and a polymer compound (I).